



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137

May 7, 2008



Dear Interested Party:

We have experienced relatively cool weather during April and the mountain snowpack within the Bighorn Basin has continued to increase slightly. While favorable to the long-term outlook, these conditions have delayed the runoff and contributed to our April inflows being the 4th lowest of record. At the same time, a lack of low elevation precipitation created an earlier-than-anticipated irrigation requirement, which placed additional demands on reservoir storage. These conditions prompted us on April 21 to propose a reduction in releases (to the Bighorn River) from 1900 cubic feet per second (cfs) to 1650 cfs. Following a discussion with resource agency representatives and stakeholders, we agreed to delay the flow reduction for a period of two weeks to provide as much time as possible to help protect the brown trout spawn in the Bighorn River. It was further agreed that should conditions not improve during the two week period, releases would then be reduced from 1900 cfs to 1500 cfs for a period of time sufficient to make up the foregone volume of water.

Unfortunately, conditions did not improve appreciably, and following a conference call on May 6 with resource agency representatives and stakeholders, we made the decision to cut releases to the Bighorn River to 1500 cfs effective May 7. This reduction in releases to the Bighorn River is expected to have an impact on the river fishery, but the reductions must be made now to help preserve our ability to meet the long-term demands on the reservoir.

Under projected conditions, we still expect to have a relatively full reservoir pool during the summer and have adequate storage to meet multipurpose needs throughout the remainder of the year. However, due to the uncertainties involved in predicting the weather, we will continue to monitor conditions very closely and will make adjustments as necessary. Updates to the operations plan can be accessed through our Web site at www.usbr.gov/gp/mtao.

We remain committed to continue exploring opportunities for enhancing benefits for all Yellowtail beneficiaries through collaborative efforts with interested parties and stakeholders from both Montana and Wyoming. I personally welcome your comments and feedback as this operational season progresses.

Sincerely,

Dan Jewell
Area Manager

RECLAMATION

Managing Water in the West

May 1, 2008

Dear Customer:

Attached are the monthly water supply outlook and projected reservoir and river operating plans as prepared in May 2008. Storage in Bighorn Lake at the beginning of May was 2.8 feet lower than on May 1, 2007. Inflow to Bighorn Lake during April was 50 percent of average, making it the 4th lowest of record for April. With the mountain snow-water equivalent at 103 percent of average on May 1 and assuming normal spring precipitation to occur, the May-July inflow to Bighorn Lake is forecast at 786,600 acre-feet or about 83 percent of average. If you have any questions or concerns, please feel free to call me at (406) 247-7318.

Tim H. Felchle
Reservoir and River Operations



U. S. Department of the Interior
Bureau of Reclamation
Montana Area Office
River and Reservoir Operations

YELLOWTAIL RESERVOIR OPERATIONS

Water Supply Forecasts and Reservoir Operations

May 1, 2008

Present Elevations & Storages:

<u>Reservoir</u>	<u>Elevation</u>	<u>Storage</u>	<u>Percent of Normal</u>
Boysen	4706.47	445,741	---
Buffalo Bill	5365.83	438,336	---
Bighorn Lake	3608.81	795,776	97

Actual Inflows (1,000 Acre-Feet):

<u>Month</u>	<u>Inflow</u>	<u>Percent of Normal</u>
<i>April-July, 2007</i>	<i>614.1</i>	<i>51</i>
<i>WY-2007 Total</i>	<i>1,364.2</i>	<i>54</i>
October	138.7	76
November	95.8	63
December	66.3	48
January	66.3	50
February	68.0	50
March	86.1	51
April	80.9	50

Actual Gains Between Boysen and Buffalo Bill to Yellowtail (1,000 Acre-Feet):

<u>Month</u>	<u>Gains</u>	<u>Percent of Normal</u>
<i>April-July, 2007</i>	<i>188.2</i>	<i>60</i>
<i>WY-2007 Total</i>	<i>462.0</i>	<i>64</i>
October	92.9	118
November	63.2	98
December	32.3	71
January	32.2	69
February	36.0	63
March	52.2	68
April	20.7	45

May Forecast of May-July Runoff (1,000 Acre-Feet):

<u>Agency</u>	<u>Gains</u>	<u>Percent of Normal</u>
USBR	233.1	96
	<u>Inflows</u>	
USBR	786.6	83

Snowpack Conditions:

S N O W - P R E C I P I T A T I O N U P D A T E

Based on Mountain Data from NRCS SNOTEL Sites

As of THURSDAY: MAY 1 , 2008

BASIN	ELEV.	SNOW WATER EQUIVALENT			TOTAL PRECIPITATION		
Data Site Name	(Ft)			%			%
		Current	Average	Avg	Current	Average	Avg
UPPER YELLOWSTONE RIVER BASIN							
BEARTOOTH LAKE	9360	28.0	25.9	108	26.6	23.5	113
BOX CANYON	6670	9.4	6.0	157	16.3	14.9	109
BRACKETT CREEK	7320	23.8	21.5	111	30.4	30.7	99
BURNT MTN	5880	.0	1.0	0	10.7	20.2	53
CANYON	7870	18.3	11.3	162	23.2	17.7	131
COLE CREEK	7850	11.2	19.7	57	11.0	21.9	50
EVENING STAR	9200	33.6	33.3	101	38.1	29.9	127
FISHER CREEK	9100	44.7	37.8	118	42.7	41.9	102
MONUMENT PEAK	8850	25.8	23.2	111	26.3	24.8	106
NORTHEAST ENTRANCE	7350	9.1	7.1	128	15.3	14.8	103
PARKER PEAK	9400	31.1	24.5	127	27.1	19.5	139
PLACER BASIN	8830	20.8	19.8	105	22.5	23.5	96

PORCUPINE	6500	5.9	3.6	164	13.1	14.9	88
SACAJAWEA	6550	15.6	12.8	122	28.2	27.6	102
SHOWER FALLS	8100	31.3	26.9	116	34.2	30.5	112
S FORK SHIELDS	8100	18.1	19.6	92	23.7	25.6	93
SYLVAN LAKE	8420	22.2	23.8	93	29.8	24.7	121
SYLVAN ROAD	7120	10.5	8.1	130	23.4	20.5	114
THUMB DIVIDE	7980	17.7	14.9	119	23.1	22.0	105
TWO OCEAN PLATEAU	9240	41.2	31.8	130	35.7	32.1	111
WHITE MILL	8700	30.9	26.4	117	30.7	31.2	98
WOLVERINE	7650	9.2	7.2	128	15.6	15.2	103
YOUNTS PEAK	8350	18.7	18.1	103	19.6	18.8	104

Basin wide percent of average				112			
							104
WIND RIVER BASIN (WYOMING)							
BURROUGHS CREEK	8750	16.6	13.6	122	20.7	19.3	107
COLD SPRINGS	9630	4.2	4.8	88	11.8	13.9	85
DEER PARK	9700	15.9	18.6	85	22.6	27.0	84
HOBBS PARK	10100	15.2	18.0	84	17.4	16.9	103
KIRWIN	9550	13.5	13.0	104	16.5	14.2	116
LITTLE WARM	9370	10.0	11.1	90	16.0	16.8	95
OWL CREEK	8975	1.3	4.0	32	8.3	8.2	101
SOUTH PASS	9040	14.3	18.0	79	19.7	22.7	87
ST. LAWRENCE ALT	8620	4.5	6.1	74	9.7	12.1	80
TOGWOTEE PASS	9580	30.3	27.9	109	33.4	29.0	115
TOWNSEND CREEK	8700	8.1	9.1	89	14.2	15.5	92
YOUNTS PEAK	8350	18.7	18.1	103	19.6	18.8	104

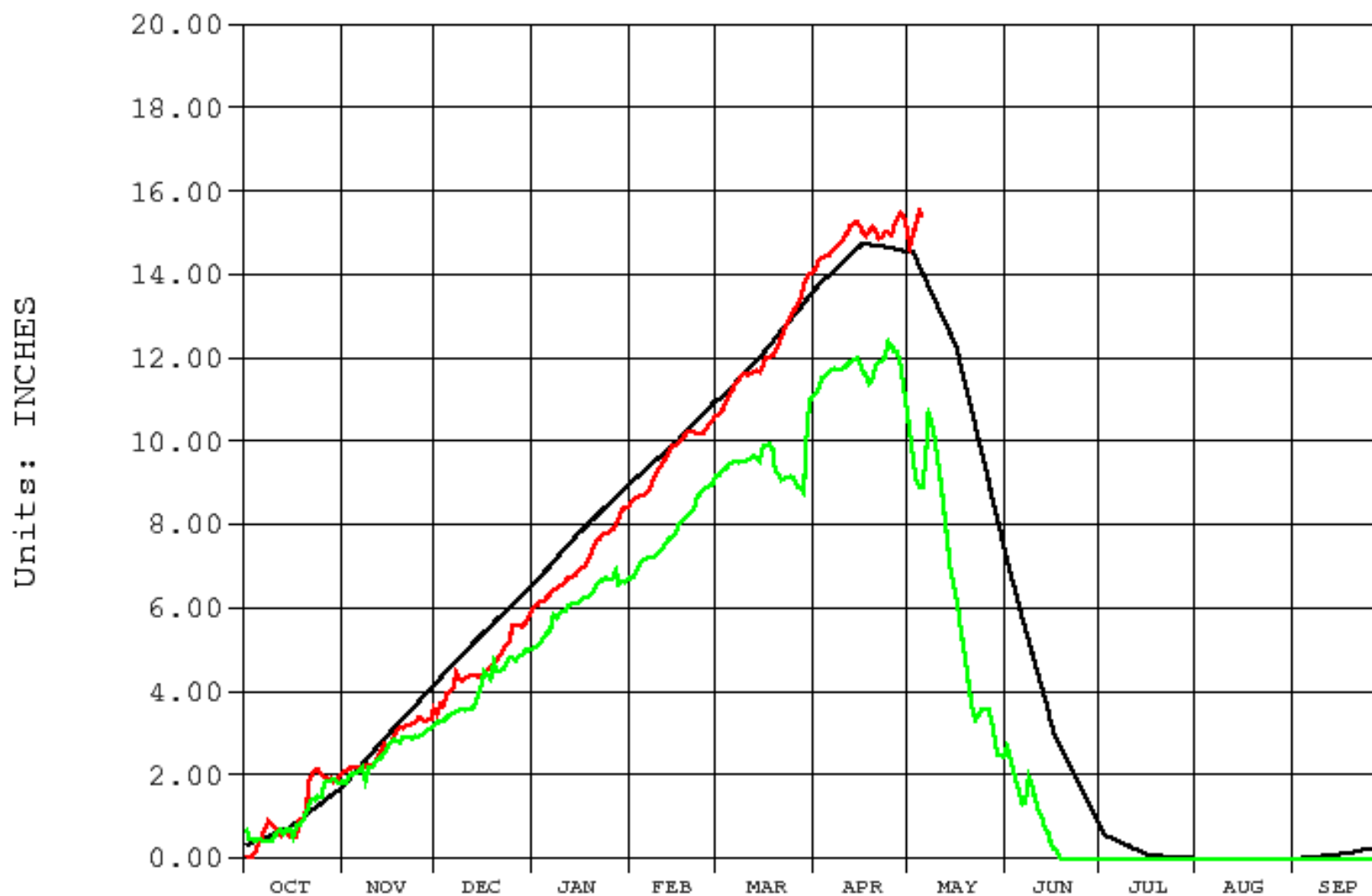
Basin wide percent of average				94			98
SHOSHONE RIVER BASIN (WYOMING)							
BLACKWATER	9780	29.3	28.8	102	27.1	24.7	110
EVENING STAR	9200	33.6	33.3	101	38.1	29.9	127
MARQUETTE	8760	8.8	11.3	78	12.4	13.7	91
SYLVAN LAKE	8420	22.2	23.8	93	29.8	24.7	121
SYLVAN ROAD	7120	10.5	8.1	130	23.4	20.5	114
YOUNTS PEAK	8350	18.7	18.1	103	19.6	18.8	104

Basin wide percent of average				100			114
BIGHORN RIVER BASIN (WYOMING)							
BALD MTN.	9380	18.8	23.6	80	18.1	21.3	85
BEAR TRAP MEADOW	8200	7.4	2.5	296	11.4	10.9	105
BLACKWATER	9780	29.3	28.8	102	27.1	24.7	110
BONE SPRINGS DIV	9350	21.1	18.3	115	20.5	18.3	112
EVENING STAR	9200	33.6	33.3	101	38.1	29.9	127
GRAVE SPRINGS	8550	11.2	11.1	101	12.3	13.1	94
KIRWIN	9550	13.5	13.0	104	16.5	14.2	116
MARQUETTE	8760	8.8	11.3	78	12.4	13.7	91
MIDDLE POWDER	7760	14.4	14.3	101	11.9	15.8	75
OWL CREEK	8975	1.3	4.0	32	8.3	8.2	101
POWDER RIVER PASS	9480	12.8	10.7	120	17.2	15.8	109
SHELL CREEK	9580	18.5	16.8	110	18.4	16.8	110
SYLVAN LAKE	8420	22.2	23.8	93	29.8	24.7	121
SYLVAN ROAD	7120	10.5	8.1	130	23.4	20.5	114
TIMBER CREEK	7950	4.7	4.8	98	10.1	10.5	96
YOUNTS PEAK	8350	18.7	18.1	103	19.6	18.8	104

Basin wide percent of average				102			106

Archive Data From 1-OCT Through 30-SEP

Plotted 05/04/2008 16:25



BHR Bighorn Lake (Yellowtail), Bighorn River near Fort Smith, MT

SE_AVG Snow Water Equivalent Average (inches)

SE Snow Water Equivalent (inches)

2008

2008 2007

BHXAOP V1.12 Run: 06-May-2008 16:14
Based on Most Probable Inflow Forecast

BIGHORN LAKE MONTHLY OPERATIONS

Bighorn Reservoir		Initial Cont Elev 795.8 kaf 3608.81 ft				Maximum Cont Elev 1328.4 kaf 3657.00 ft				Minimum Cont Elev 493.6 kaf 3547.00 ft				Total
	2008	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	

Boysen Release	kaf	55.9	69.9	76.9	69.2	59.5	43.1	41.7	43.1	43.2	39.0	43.1	44.6	629.2
Boysen Release	cfs	909	1175	1251	1125	1000	701	701	701	703	702	701	750	
Buffalo Bill Riv Flo	kaf	71.7	136.8	128.8	101.9	78.6	24.9	20.8	21.5	21.5	19.4	21.5	24.4	671.8
Buffalo Bill Riv Flo	cfs	1166	2299	2095	1657	1321	405	350	350	350	349	350	410	
Station Gain	kaf	51.9	188.1	6.6	9.9	47.3	79.0	64.7	46.7	49.9	61.5	80.9	50.7	737.2
Monthly Inflow	kaf	179.5	394.8	212.3	181.0	185.4	147.0	127.2	111.3	114.6	119.9	145.5	119.7	2038.2
Monthly Inflow	cfs	2919	6635	3453	2944	3116	2391	2138	1810	1864	2159	2366	2012	

Turbine Release	kaf	117.1	183.0	212.3	189.9	176.6	167.2	157.8	163.2	163.1	147.3	163.2	145.2	1985.9
Bypass/Spill/Waste	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Release	kaf	117.1	183.0	212.3	189.9	176.6	167.2	157.8	163.2	163.1	147.3	163.2	145.2	1985.9
Total Release	cfs	1904	3075	3453	3088	2968	2719	2652	2654	2653	2652	2654	2440	

Spring Flow	kaf	4.3	4.2	4.3	4.3	4.2	4.3	4.2	4.3	4.3	3.9	4.3	4.2	50.8
Irrigation Reqmnt	kaf	24.6	26.8	27.7	26.8	18.8	4.1	0.0	0.0	0.0	0.0	0.0	0.6	129.4

Afterbay Rels	kaf	121.4	187.2	216.6	194.2	180.8	171.5	162.0	167.5	167.4	151.2	167.5	149.4	2036.7
Afterbay Rels	cfs	1974	3146	3523	3158	3038	2789	2723	2724	2723	2723	2724	2511	
River Release	kaf	96.8	160.4	188.9	167.4	162.0	167.4	162.0	167.5	167.4	151.2	167.5	148.8	1907.3
River Release	cfs	1574	2696	3072	2723	2723	2723	2723	2724	2723	2723	2724	2501	
Min Release	kaf	96.8	148.8	153.7	153.7	148.8	153.7	148.8	153.7	153.7	138.8	153.7	148.8	1753.0

End-Month Targets	kaf		1070.0	1070.0								873.6		
End-Month Content	kaf	858.2	1070.0	1070.0	1061.1	1069.9	1049.7	1019.1	967.2	918.7	891.3	873.6	848.1	
End-Month Elevation	ft	3617.97	3640.00	3640.00	3639.28	3639.99	3638.35	3635.72	3630.79	3625.53	3622.24	3620.00	3616.59	
Net Change Content	kaf	62.4	211.8	0.0	-8.9	8.8	-20.2	-30.6	-51.9	-48.5	-27.4	-17.7	-25.5	52.3

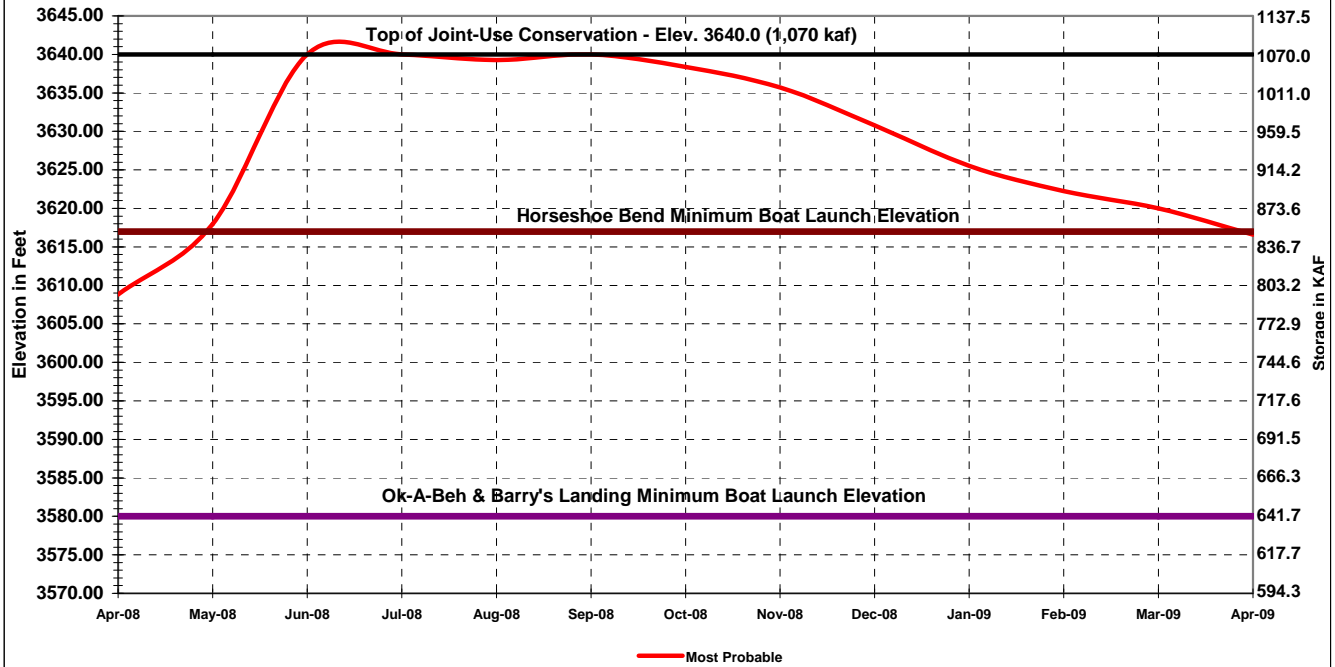
Yellowtail Power	2008	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Total

Turbine Release	kaf	117.1	183.0	212.3	189.9	176.6	167.2	157.8	163.2	163.1	147.3	163.2	145.2	1985.9
Generation	gwh	44.298	72.629	87.049	77.763	72.315	68.352	64.021	65.375	64.284	57.316	63.003	55.622	792.027
End-Month Power Cap	mw	266.3	287.5	287.5	286.8	287.5	285.9	283.2	278.4	273.4	270.3	268.2	265.1	
% Max Gen		21	35	41	36	35	32	31	31	30	30	29	27	
Ave kwh/af		378	397	410	409	409	409	406	401	394	389	386	383	399

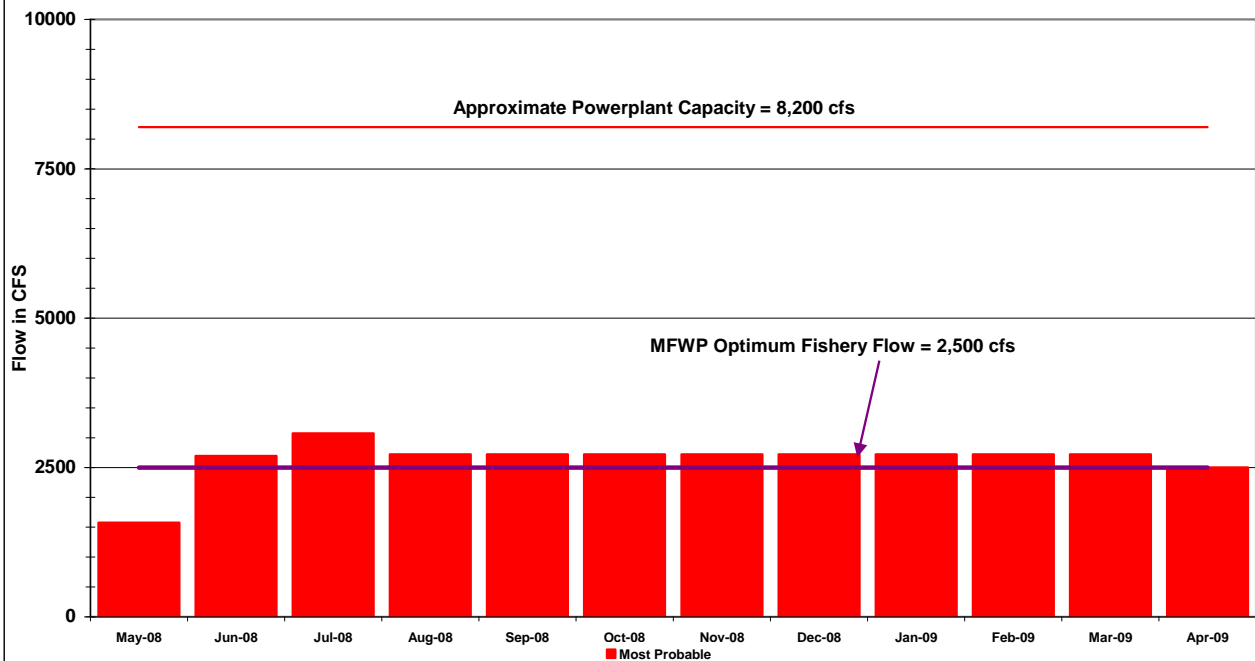
Upstream Generation	gwh	28.061	28.233	30.227	29.536	27.679	11.556	9.244	9.558	9.542	8.590	9.506	11.490	213.222
Total Generation	gwh	72.359	100.862	117.276	107.299	99.994	79.908	73.265	74.933	73.826	65.906	72.509	67.112	1005.249

BIGHORN LAKE

BIGHORN LAKE ELEVATION



BIGHORN RIVER FLOW BELOW AFTERBAY



WATER YEAR 2008